Lat 39.37459 Lon -120.84194

United States Department of Agriculture | Forest Service | LNF

Reply To: 3420 Date: November 7, 1994

Subject: Evaluation of Coleman/Dempsey Springs Plantations, Nevada City RD, Tahoe NF for preventative thinning (FPM Rept.# NE95-1)

To: District Ranger, Nevada City RD, Tahoe NF

The Coleman/Dempsey Springs Plantations (460-1&2; 465-1,2,3&74) cover approximately 625 acres on the Nevada City Ranger District of the Tahoe National Forest. The plantations are predominantly 20-30 year old ponderosa pine and sugar pine. They were established as a result of fire rehabilitation. The plantations are overstocked with conifers and the understory is fully occupied with green-leaf manzanita and other shrubs. The District has requested Forest Pest Management (FPM) funding to complete the NEPA analysis and to release the plantations.

On June 16, 1994, I visited the plantations with John Bradford, Donn Thane, Jean Bystry and Gary Kline, Tahoe NF. The plantations were overstocked with conifers and competing brush. The trees were generally healthy except that overcrowding had caused the trees to be more spindly than released trees. John raised the concern that the spindly growth form was prone to snow damage.

Originally planted between 1966 and 1975, these stands are a result of efforts to reforest fire-caused brushfields. The site index for these plantations ranges between 60 and 80. The plantations were planted with 435 trees per acre. A variety of release and/or thinning treatments were applied to each plantation, the last of which was completed between 8 and 17 years ago for each respective plantation. Current stocking ranges from 200 to 250 stems per acre. The maximum diameter for the pine generally ranges from 6" to over 12" on the respective plantations. A recent stand examination shows that the diameter growth slowed dramatically 10 years ago. In the last 5 years growth has slowed or remained constant on all but one of seven plots.

Stands that are overstocked, such as these plantations, contain stressed trees that are attractive hosts to insects, especially during periods of drought. The ponderosa pine is reaching the size suitable for attack by mountain pine beetle or western pine beetle. For this reason, it is advisable to release the conifers in these plantations from competition.

In thinning pine plantations, it is important to remove or treat the thinning slash. Depending on the time of year, pine slash can attract engraver beetles to the areas. A few precautions during thinning:

- Avoid piling green pine slash
- Avoid leaving green pine slash within 5 feet of a pine leave tree
- Avoid decking or temporarily storing bundles of green pine stems within 10 feet of a pine leave trees.

It is easy to create favorable conditions for insects that are harmful to pine when harvesting pine trees. As we discussed in the field, removal, chipping, or both are good strategies for minimizing post treatment attacks.

Please call me at (916) 246-5087 if you have any questions.

Bill Woodruff

BILL WOODRUFF
Pathologist
FPM NE CA Service Area